

DIIALOG(R)File 352:Derwent WPI

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014517921 \*\*Image available\*\*

WPI Acc No: 2002-338624/200237

XRPX Acc No: N02-266229

**Liquid crystal display device in electronic device e.g. television, has  
multiple pixels having storage circuits**

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Number of Countries: 005 Number of Patents: 005

Patent Family:

| Patent No         | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|-------------------|------|----------|---------------|------|----------|----------|
| US 20020024485    | A1   | 20020228 | US 2001916306 | A    | 20010730 | 200237 B |
| <b>CN 1337669</b> | A    | 20020227 | CN 2001124995 | A    | 20010808 | 200237   |
| JP 2002149138     | A    | 20020524 | JP 2001235487 | A    | 20010802 | 200250   |
| KR 2002013727     | A    | 20020221 | KR 200147409  | A    | 20010807 | 200257   |
| TW 518533         | A    | 20030121 | TW 2001119163 | A    | 20010806 | 200356   |

Priority Applications (No Type Date): JP 2000240332 A 20000808

Patent Details:

| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
|----------------|------|--------|-------------|--------------|
| US 20020024485 | A1   | 38     | G09G-003/36 |              |
| CN 1337669     | A    |        | G09G-003/36 |              |
| JP 2002149138  | A    | 35     | G09G-003/36 |              |
| KR 2002013727  | A    |        | G09G-003/36 |              |
| TW 518533      | A    |        | G09G-003/20 |              |

Abstract (Basic): US 20020024485 A1

NOVELTY - Each of the pixels respectively have storage circuit  
(A1-A3 and B1-B3) such as SRAM, DRAM, FeRAM, etc.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included  
for

liquid crystal display device driving method.

USE - For electronic devices such as CD and DVD players,

Patented: 5/23/2005

television, personal computer, video camera, head mount display, portable information terminal such as electronic book, mobile computer, cell phone, etc.

ADVANTAGE - Electric power consumption during display of still picture is greatly reduced by providing pixels with storage circuits.

DESCRIPTION OF DRAWING(S) - The figure shows the circuit diagram of pixel with multiple storage circuits.

Storage circuits (A1-A3,B1-B3)

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Title Terms: LIQUID; CRYSTAL; DISPLAY; DEVICE; ELECTRONIC; DEVICE; TELEVISION; MULTIPLE; PIXEL; STORAGE; CIRCUIT

Derwent Class: P85; T01; T04; U14; W01; W03; W04

International Patent Class (Main): G09G-003/20; G09G-003/36

International Patent Class (Additional): G02F-001/133; G02F-001/136;

G09F-009/30; G09F-009/35

File Segment: EPI; EngPI

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[19] 中华人民共和国国家知识产权局

[51] Int. Cl.<sup>7</sup>

G09G 3/36

G02F 1/136

# [12] 发明专利申请公开说明书

[21] 申请号 01124995.1

[43] 公开日 2002 年 2 月 27 日

[11] 公开号 CN 1337669A

[22] 申请日 2001.8.8 [21] 申请号 01124995.1

[30] 优先权

[32] 2000.8.8 [33] JP [31] 240332/00

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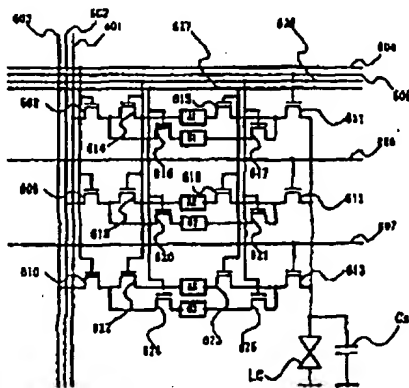
代理人 吴增男 张志醒

权利要求书 8 页 说明书 34 页 附图页数 20 页

[54] 发明名称 液晶显示装置及其驱动方法

[57] 摘要

本发明的目的之一是提供带有具有新电路结构的驱动电路和像素、能够有低功耗的液晶显示装置。在使用  $n$  位数字图像信号( $n$  为整数)显示图像的液晶显示装置中,通过在每个像素中装入  $n \times m$  个存储电路( $m$  为整数),它包括在像素中存储  $m$  帧数字图像信号的功能(在实例的所示附图中, $n=3, m=2, 3$  位  $\times 2$  帧被存储在存储电路 A1 至 A3 和 B1 至 B3 内)。因此,在显示静止图像时,通过重复读取暂时存储在存储电路中的数字图像信号并且在每帧中显示,可以停止源信号线驱动电路在这段时间内的驱动,以减小液晶显示装置的功耗。



ISSN 1008-4274